

03/23/00
JC784 U.S. PTO

03-27-00

7

In the United States Patent and Trademark Office

Mailed 2000 March 23

Assistant Commissioner for Patents
Washington, District of Columbia 20231

Sir:

Please file the following enclosed patent application papers:

Applicant #1, Name: Bernard Rivkin

Applicant #2, Name: _____

Title: A Magnetic Force Eyeglass Holder, etc.

Specification, Claims and Abstract, Nr. Of Sheets 12

Declaration: Date Signed: March 23, 2000

Drawing(s): Nr. Of Sheets Enc.: Formal: _____ Informal 2

Small Entity Declaration of Inventor(s) SED of Non-Inventor/Assignee/Licensee

Assignment: please record and return; recordal fee enclosed

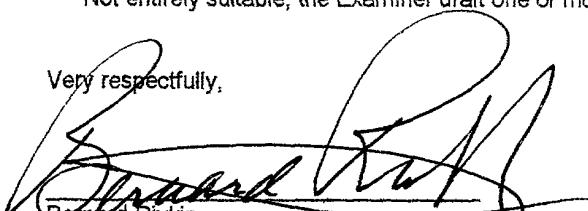
Check for \$495 for:

\$495 for filing fee (not more than three independent claims and twenty total claims are presented).

Return Receipt Postcard Addressed to Applicant #1:

Request Under MPEP § 707.07(j): The undersigned, a pro se applicant, respectfully requests that if the Examiner finds patentable subject matter disclosed in this application, but feels that Applicant's present claims are Not entirely suitable, the Examiner draft one or more allowable claims for applicant.

Very respectfully,


Bernard Rivkin

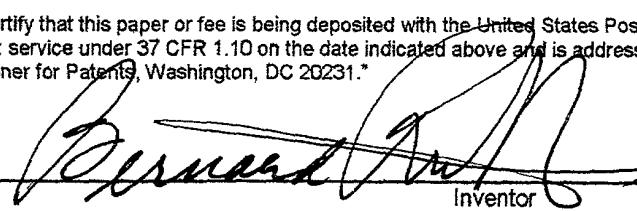
29 Oak Forest Place
Address (Send Correspondence Here)

Santa Rosa, CA 95409

Express Mail Label # EK 387298597 US.

Date of Deposit March 23, 2000

I hereby certify that this paper or fee is being deposited with the United States Postal Service using "Express Mail Post Office To Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to "Box Patent Application, Assistant Commissioner for Patents, Washington, DC 20231."

Signed: 

Inventor

03/23/00
JC784 U.S. PTO
09/535082

03/23/00
JC784 U.S. PTO
09/535082

In the United States Patent and Trademark Office

Sole Applicant: Bernard Rivkin

Title: "A magnetic force eyeglass holder"

Small Entity Declaration – Small Business Concern

I hereby declare that I am

The owner of the small business concern identified below:

Name of Concern: Bellaire Group

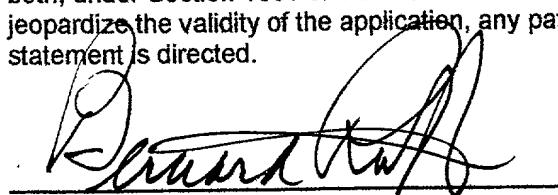
Address of Concern: 29 Oak Forest Place, Santa Rosa, CA 95409

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

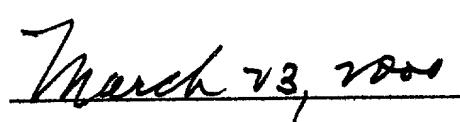
I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the above entitled invention of the above applicants and the specification filed herewith.

I acknowledge a duty to file, in the above application for patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate (37 CFR 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.



Signature of Officer of Small Business Concern



Date

Bernard Rivkin, President

29 Oak Forest Place, Santa Rosa, CA 95409

Address of Officer

Patent Application of

Bernard Rivkin for

A MAGNETIC FORCE EYEGLASS HOLDER, WHICH IS REMOVABLE,
REUSABLE AND NON-INVASIVE, FOR USE ON APPAREL AND OTHER
SURFACES.

BACKGROUND AND FIELD OF INVENTION

The invention is not a new material, but rather, the discovery of a new and novel solution to a common problem with the use of special materials.

Users of eyewear frequently wish to remove them temporarily. Now comes the problem of where to put them. If you have a pocket to put them in, what else is in the pocket that will scratch the lenses? When you want to retrieve the glasses, which pocket are they in? If you put them down on a table, will you put them down on the frames or on the lenses that may be damaged? Then will you remember to pick them up and not leave them behind? If you have sunglasses or other special glasses as well, that's a whole new set of problems.

The problems outlined above are currently being served in several ways. Cords or chains that attach to the eyeglass temples and are worn around the neck are the most typical present devices. Such devices are disclosed in US Patent No. 5956812 also Patent No. 4136934 and many others. These are unsatisfactory

for many reasons. Namely, when the glasses are being held they are awkward and uncomfortable, especially when the wearer is in motion. If the chain or cord is kept attached to the glasses, it is very uncomfortable while wearing. If you take the chain off and on it is a nuisance and a storage problem, especially if you need the glasses to find and install the temple attachments. Metal and mechanical holders that are fitted in the pocket are awkward and unattractive and tend to pull the pocket down because of the weight of the glasses and the attachment. Some examples are shown in US Patent Nos. 5842613, 5699990, 5839708, 5864924, 5794312, 5860191. Another method shown is the use of a pin attachment, such as in US Patent No 4458384. This solution is undesirable because it damages the fabric to which it is attached. Adhesive attachment is not satisfactory because the adhesive always leaves a trace that attracts and accumulates dirt.

The present development overcomes all of these objections and provides the utility with an ease of use, inexpensive, attractive and definitely useful solution. To install a holder, one merely places the magnetic element on top of the garment and juxtaposes a keeper underneath that will instantly clamp the holder to the fabric, at which time, the temple of the glasses is inserted in the holding area provided. There is no critical alignment, the attraction is instantaneous and the removal is similarly instantaneous by simply tilting the holder forward while holding the keeper, thus breaking the field of force. The present disclosure takes advantage of a relatively new material called Rare Earth Magnets or Neodymium (NEFEM). This new material has a strength 100 times greater than the steel magnets of last century, while its size is very dramatically reduced. The field of force is so concentrated and powerful that a 1/10th-oz. disc magnet of Neodymium can hold more than 30 times its weight.

DESCRIPTION OF INVENTION

Fig. 1 shows a perspective view of a preferred embodiment of a removable and reusable non-invasive magnetic force eyewear holder for use on clothing or other surfaces. The principle part No. (22A) is a holder that embodies two rare earth magnets (20) mounted on the bottom. No. (28) is a keeper plate preferably made of Alnico. When holder (22A) is placed on the outside of clothing such as a blouse, sweater, jacket, etc., and keeper No. (28) is placed underneath the apparel contiguous in location to the holder, the magnetic force between the magnets (20) and the keeper (28) will clamp the apparel and provide a holding means for eyeglasses.

OPERATION OF THE INVENTION

The operation of a preferred embodiment is, a saddle shaped unit of injection molded plastic (22A) to which two rare earth neodymium magnets (20) are affixed in wells formed to allow for insertion of the magnetic disks and the extra strong adhesive to hold them in place. This holder may be fabricated in other ways using other materials in keeping with the spirit of the embodiment. The keeper (28) in the preferred embodiment is a disk preferably made of Alnico material, that is composed of aluminum, nickel, and cobalt, together with approximately 50% of iron. The advantage of Alnico is its higher saturation capability and lower coercivity. This combination in concert with favorable weight and costing, are the advantages of its use. Keepers can also be made of ferrites or other magnetic saturable materials; however, each has its disadvantages such as the brittleness of ferrite, cost, weight of other materials.

Other species of this invention are shown in (Fig. No. 9) & (Fig. No. 12). In Fig. (9) a holder is created with two pieces, each of which has a rare earth magnet enclosed and the two pieces are attached with a chain of non-magnetic material. These parts can be molded or cast or stamped or of semi-precious stones, etc. and will function in the same manner as the preferred embodiment. The advantage of this species is that it can be made more attractive and decorative by using precious metal or stones. Keepers can be formed with rare earth magnets attached, that may or may not be adjustable (see Fig. 8) & (Fig. 17). The advantage of the keeper with magnets is a multiplication of the force pattern and, therefore, the greater holding strength for heavier apparel or security of the more expensive holder parts. Another species shown in Fig. (12) shows a holder with one rare earth magnet and a formed opening into which eyeglass temple pieces can be inserted. The keeper piece is an appropriately sized, preferably Alnico part, that may also have a rare earth magnet (see Fig. 17) attached for applications where the holder would encounter rough usage.

Attachment of the holder (22C) is effected by bringing it into proximity of the keeper (28) placed underneath the garment. Natural magnetic attraction simplifies the procedure. No skill or training is needed. Removal of the holder requires tilting the holder downward until magnetic force pattern is broken.

CONCLUSIONS, RAMIFICATIONS AND SCOPE OF INVENTION

The reader will see that the removable and reusable non-invasive magnetic force eyewear holder for use on clothing or other surfaces is a highly reliable, lightweight, economical device that can be used by persons of any age. There is no training necessary or special agility required.

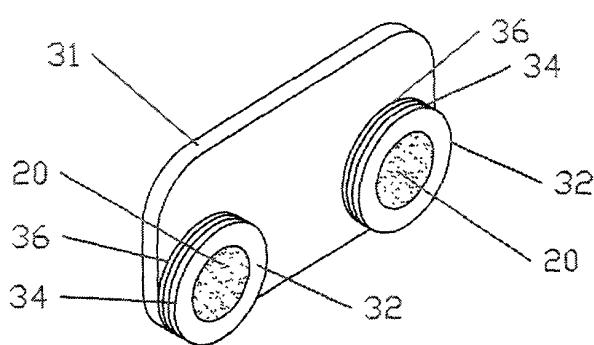
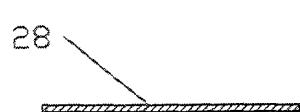
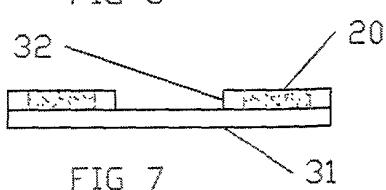
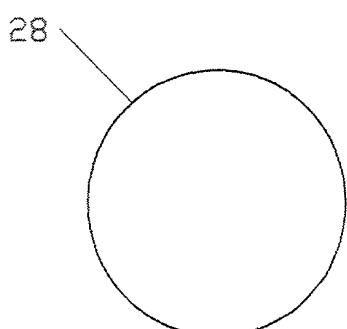
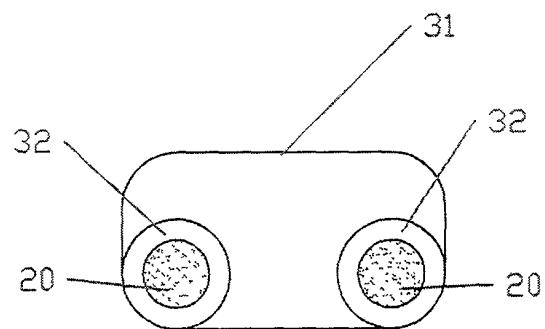
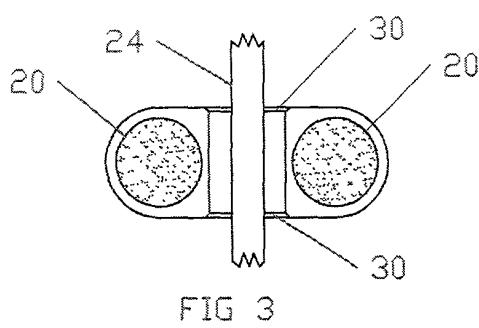
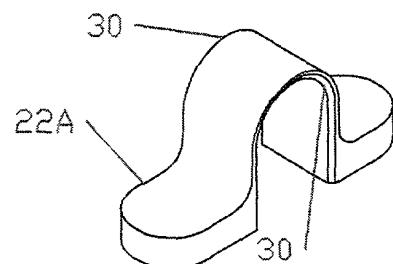
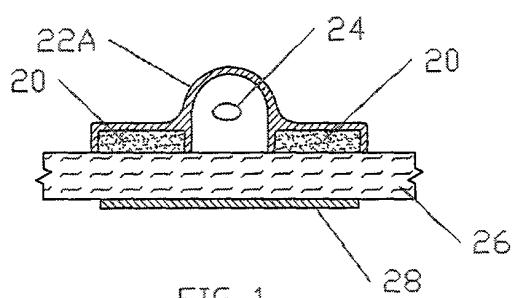
area for additional universality of fit for eyeglasses or other small objects weighing less than 3 lbs.

Claims: I claim:

1. A method for holding eyeglasses using a magnetic force means in cooperation with a magnetically saturable keeper element whereby a convenient removable and reusable non-invasive securing system is created.
2. The combination according to Claim 1 wherein the magnetic force means is one or more Rare Earth disc magnets attached to a formed eyeglass holder.
3. The combination according to Claim 1 wherein a magnetically saturable keeper element is made of Alnico or other highly magnetically saturable material.
4. The combination according to Claim 1 wherein a holder is formed with an eyeglass holding area and Rare Earth magnets are attached on the bottom.
5. The combination according to Claim 1 where two or more of the magnetic flux means holders are connected using a flexible non-magnetic element.
6. The combination according to Claim 1 wherein the keeper element has one or more magnets attached either fixedly or adjustably.
7. The combination according to Claim 2 wherein the formed eyeglass holding area incorporates an insert of resilient material.
8. A method for holding eyeglasses using a magnetic force means in cooperation with a magnetically saturable keeper element whereby a convenient removable and reusable non-invasive eyeglass securing system for engagement on apparel is created.
9. The combination according to Claim 8 wherein a magnetic force means is placed on top of apparel and a magnetically saturable keeper is juxtaposed below the said apparel forming a fastening flux engagement.

10. The combination according to Claim 8 where the magnetically saturable keeper element has an eyeglass holding area formed and is placed on top of apparel and the magnetic force means is juxtaposed beneath the said apparel for magnetic flux fastening.
11. The combination according to Claim 10 wherein the eyeglass holding area incorporates an insert of resilient material.
12. The combination according to Claim 2 wherein the holder is formed to accommodate scissors, pens, pencils and other objects weighing less than 48 ozs.
13. The combination according to Claim 1 wherein a two sided pressure sensitive adhesive coated foam attaching means is included in the arrangement, to be used to mount the magnetically saturable backer element to a non-magnetic surface.

1/2



2/2

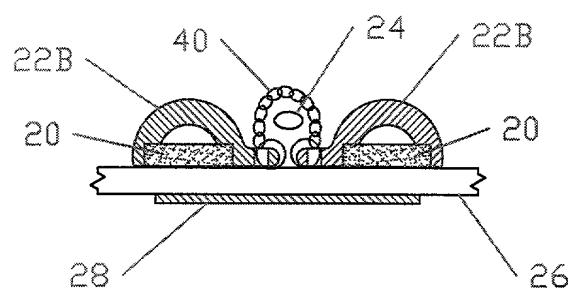


FIG 9

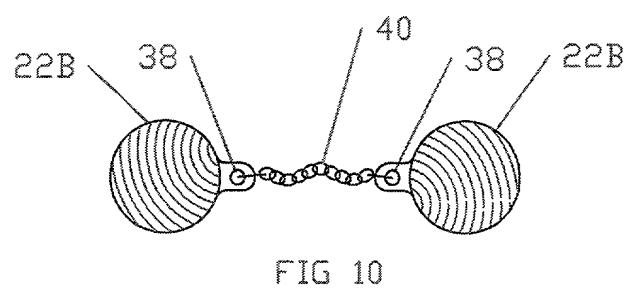


FIG 10

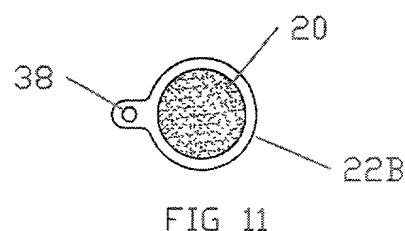


FIG 11

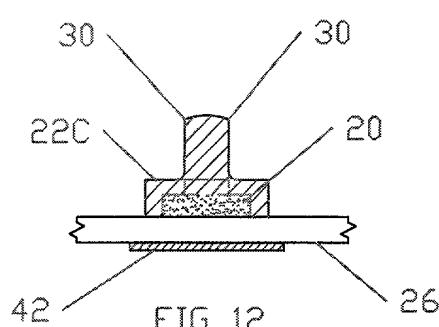


FIG 12

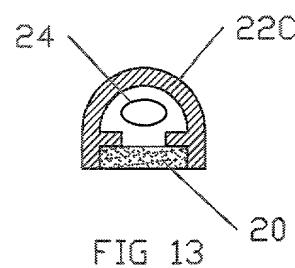


FIG 13

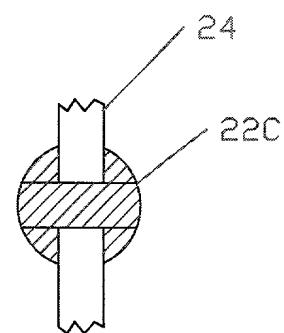


FIG 14

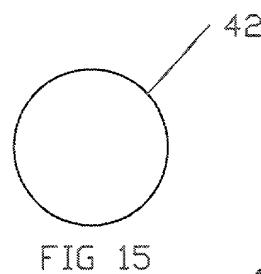


FIG 15



FIG 16

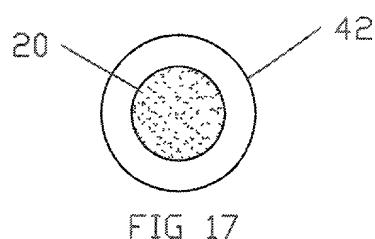


FIG 17

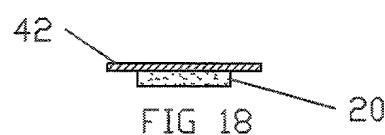


FIG 18

Declaration for Utility Patent Application

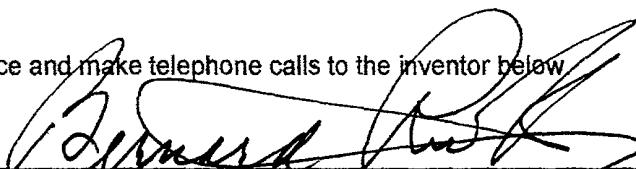
As a below-named inventor, I hereby declare that my residence, post office address, and citizenship are as stated below next to my name and that I believe that I am the original, first, and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention, the specification of which is attached hereto and which has the following title:

A magnetic force eyeglass holder

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration. I acknowledge a duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, Section 1001, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Please send correspondence and make telephone calls to the inventor below

Signature: Sole Inventor: 

Print Name: Bernard Rivkin

Date: March 22, 2000

Legal Residence: Santa Rosa, CA

Citizen of: U.S.A.

Post Office Address: 29 Oak Forest Place, Santa Rosa, CA 95409

Telephone: 707-537-0446